

Service Date: April 17, 1986

DEPARTMENT OF PUBLIC SERVICE REGULATION
BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MONTANA

IN THE MATTER Of The Application) UTILITY DIVISION
Of The CITY OF SCOBEEY To Increase) DOCKET NO. 85.11.47
Water Rates And Charges) ORDER NO. 5190

APPEARANCES

FOR THE APPLICANT:

Jerry Schuster, City Attorney, 112 Main Street, Wolf Point,
Montana 59201.

FOR THE COMMISSION:

Robin McHugh, Staff Attorney, 2701 Prospect Avenue, Helena,
Montana 59620.

BEFORE:

Danny Oberg, Commissioner and Hearing Examiner

BACKGROUND

1. On November 22, 1985, the City of Scobey (City or Applicant) filed and application with this Commission requesting authority to increase rates and charges for water service to its customers in the Scobey, Montana area. The Applicant requested an average increase of approximately 82 percent which constitutes an increase of approximately \$84,795 in annual revenues.

2. On February 20, 1986, pursuant to notice of public hearing, a hearing was held in the Nemont Telephone Building, Friendship Room, Scobey, Montana. The purpose of the public hearing was to consider the merits of the Applicant's proposed rate adjustments. At the close of the public hearing, all parties waived their rights to a proposed order and stipulated to authorize the Commission to issue a Final Order in this Docket.

ANALYSIS AND FINDINGS OF FACT

3. At the public hearing the Applicant presented the testimony and exhibits of the following witnesses:

Steven Ike, Consulting Engineer
Jerry Storhaug, Consulting Engineer
Richard Mikkelson, City Clerk/Treasurer
Gary Cromwell, Mayor
Joe Metzger, Councilman
Ron Audet, Councilman

These witnesses testified relative to: the need for the proposed capital improvements, the estimated cost of the proposed capital improvements, the financing of the proposed capital improvements, debt service obligations and rate structure.

4. During the course of the public hearing seven public witnesses appeared and offered testimony regarding the City's proposed capital improvement program and rate increase application. All of these witnesses acknowledged that a need existed to increase the City's available supply of water to consumers, either through increased storage or additional sources of supply.

Several of the public witnesses expressed concern that the City's proposed rate structure would in discrimination and rate inequities. These witnesses indicated that it was their belief that the proposed inverted block rate structure discriminated against large volume users and that rate inequities resulted because not all consumers connected to the water system were metered.

CAPITAL IMPROVEMENT PROGRAM

5. The City in its application has set forth a proposed capital improvement program for the water utility. The total estimated cost of the capital improvements as outlined by the City is \$400,268 (includes the cost of the Water System Master Plan and capitalization of the Debt Service Reserve requirement of the proposed bond issue). The following Table 1 sets out the cost considerations as presented by the City:

TABLE 1

1. Project Cost	\$295,500
2. Using 500,000 gallon reservoir instead of 412,000 gallon reservoir	\$ 15,000
3. Water Study	\$ 11,000
4. Debt Service Reserve	\$ 78,768
TOTAL	\$400,268

6. The City proposes that construction of the capital improvements outlined in Table 1, be financed through the issuance of revenue bonds having a term of 10 years and a maximum interest rate of 9.25 percent, with the requirements that the City have a reserve fund in an amount equal to one year's principal and interest payment on the bond and provide a debt service coverage of 125 percent.

7. The City is proposing the construction of a 500,000 gallon reservoir with necessary appurtenances. The City in its testimony and exhibits indicated that, during periods of high water demand, the present storage capacity was inadequate and has resulted in depletion of stored water in its 100,000 gallon elevated storage tank. The City witnesses further stated that due to the inadequate amount of stored water on the system, consumers were forced to adhere to sprinkling restrictions, that there had been occasions when consumers connected to the system were totally without water and adequate fire protection was unavailable.

8. The City's contention that consumers were experiencing a total loss of water during peak water demand periods was supported by public testimony. Dr. Merl Fitz testified that the hospital which is connected to the City's system experienced total loss of water on 5 or 6 occasions during the summer of 1985; John Reiner testified that his son, the local dentist, has had to suspend operation due to no water at his office.

9. Relative to the depletion of stored water, Councilman Joe Metzger testified that the present 100,000 gallon storage facility was less than 50 percent full on 26 occasions during the summer of 1985. He further stated that on 10 of those occasions the storage tank was completely empty.

10. Councilman Ron Audet, who was formerly the fire chief for the volunteer fire department, testified that he had grave concerns regarding the water systems ability to provide adequate fire protection. In his testimony he indicated that based upon his knowledge of the fire flow requirements within the City it was his opinion that the City needed a minimum of 100,000 gallons of stored water to provide adequate fire protection. He indicated that due to this minimum fire flow requirement he supported the construction of the 500,000 gallon storage reservoir.

11. The City's witnesses indicated that construction of the 500,000 gallon reservoir would insure an adequate supply of water during periods of peak water demand and improve the water system's ability to provide adequate fire flows.

12. It is clear, based upon the testimony outlined in the preceding Findings of Fact, that the City water utility is experiencing severe water shortages during periods of peak demand i.e. the summer irrigation season. In general there are two ways to increase the available supply of water to consumers connected to a water system: 1) increase water storage or 2) development of additional sources of supply. The City indicated that it had investigated both alternatives, and had determined that development of additional supply sources was not necessary, at this time, because available supply exceeded the maximum daily demand experienced on the water system. This being the case it is reasonable to assume that the construction of additional storage will result in an increase in the supply of deliverable water to consumers and result in an improved level of water service to consumers.

13. The Commission finds, based upon the testimony of the City's witnesses, that the capital improvement program as proposed by the City is reasonably prudent and therefore, accepts the improvements as outlined. The Commission also accepts the City's estimated cost of \$400,268 as being a reasonable estimate of the construction costs.

DEBT SERVICE

14. The City proposes to finance the capital improvements outlined in Table 1 of this Order by the issuance of revenue bonds.

The City proposes to issue \$400,000 in revenue bonds to be repaid over a period of 10 years with the requirements that the City capitalize from the bond proceeds a reserve fund in an amount equal to one years principal and interest payment on the bonds and provide a debt service coverage of 125 percent.

15. The Applicant currently has an outstanding revenue bond that it does not anticipate retiring with the issuance of the proposed \$400,000 bond issue. This bond issue has an annual principal and interest payment of \$6,500.

16. In any sale of municipal bonds, the purchasers of the bonds must be assured that their investment is secure. To provide this security, the municipality makes a promise, called a covenant, to do certain things that will ensure that always be able to pay the bond's principal and interest as they come due. In this instance, the City proposes to include covenants agreeing to establish a bond reserve fund in an amount equal to one years principal and interest payment on the bond, amounting to \$63,015, which will be capitalized from the bond proceeds and provide a debt service coverage ratio of 125 percent.

17. The Commission finds the bond covenants, establishment of a reserve fund and the 125 percent coverage ratio, to be among the standard requirements for the issuance of revenue bonds and therefore, accepts the requirements.

18. The Commission finds the issuance of \$400,000 in revenue bonds with a maximum term of 10 years and a maximum interest rate of 9.25 percent, with the requirements that the City establish a bond reserve in an amount equal to one year's principal and interest payment on the bonds and provide a debt service coverage of 125 percent, to be appropriate.

19. When the City completes the sale of the proposed revenue bonds it will incur an annual principal and interest payment on all outstanding revenue bonds of approximately \$69,515. It will also incur the obligation to have a net operating income of at least \$17,378 to meet the requirement that it achieve a 125 percent coverage ratio. To determine net operating income,

operation and maintenance expense, as well as debt service, are subtracted from the total revenues of the utility. The required net operating income is calculated by multiplying the annual principal and interest payment on outstanding bonds by 25 percent ($\$69,515 \times .25 = \$17,378$).

OPERATION AND MAINTENANCE EXPENSE

20. The test year operation and maintenance expenses totaling \$96,000 were not challenged by any party participating in this proceeding and are, therefore, accepted by the Commission.

21. The Commission finds the following test year operating revenue deductions to be reasonable:

Operating Expense	\$	96,000
Debt Service		69,515
Debt Service Coverage		17,378
TOTAL	\$	182,893

The test year expense assumes full annualized costs for the proposed revenue bond issue. The Commission chooses to calculate expenses in this manner, as it is the most reasonable way of accounting for the effect of the proposed bond issue on the operating statement of the utility.

REVENUE NEED

22. The City indicated that the total annual revenue generated by the water utility would be approximately \$103,700 for the test period. The test period water utility revenues are not a contested issue in this case and are, therefore, accepted by the Commission.

23. The Commission, based upon the Findings of Fact contained herein, finds that the Applicant should be allowed to increase annual revenues by \$79,193. This requirement is calculated as follows:

Operating Revenues	\$103,700
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LESS:

Operating Expenses	\$ 96,000
Debt Service	69,515
Debt Service Coverage	17,378
Total Revenue Requirement	\$182,893
REVENUE DEFICIENCY	\$ 79,193

WATER VOLUMES

24. Some consumers connected to the City water system are not metered, the City's exhibits indicate that 136 consumers (36 residential and 100 commercial) are receiving water through unmetered service connections. The fact that this number of consumers receives water through unmetered service connections (approximately 20%) prevents the City from determining the actual total billable gallons of water consumption on its water system.

Absent the total billable water consumption on the system, the City must, out of necessity, estimate this figure for use in its revenue projections and rate design.

25. Questions were addressed to City witnesses in an effort to determine the City's assumed usage for consumers connected to the system that received unmetered water. The City witnesses responded by stating that all unmetered commercial consumers were assumed to be using 4,000 gallons or less per month. A study conducted in December, 1982 of all metered residential consumers indicated that the average residential consumer used approximately 12,000 gallons monthly and this consumption amount is assumed for all unmetered residential services.

The record developed in this Docket, in the area of the assumed consumption levels for unmetered consumers, did not, in the Commission's view, indicate that the assumptions were not within a zone of reasonableness. The Commission however would caution the City that it should endeavor to implement full metering of its water system to assure complete accuracy in the development of rates for the water system and equity in the assessment of those rates (further discussion of rate equity will appear later in this order).

26. During the public hearing the Commission requested that the City explain the water utility's billing practice for City water uses. The City explained that at the present time the water utility does not bill the City for any water used by the City. Upon hearing this the Commission requested the submission of a late-filed exhibit outlining City uses of water and the estimated water volumes associated with those uses.

27. The City in its late-filed exhibit provided the following data regarding annual water use by the City:

City Hall	80,000 gallons
City Park	416,000 gallons
City Swimming Pool	250,000 gallons
City Ball Park	480,000 gallons
City Cemetery	345,600 gallons
 TOTAL	 1,571,600 gallons

The above listed water consumption is billable consumption chargeable to the City and should be included in the City's revenue projections and rate design considerations (further discussion of the water utility charging the City for usage will appear later in this order).

RATE DESIGN

28. In its application, the City has proposed the implementation of a rate structure that includes a minimum monthly charge, with an allowance for 4,000 gallons of consumption in the minimum, and a two block inverted commodity rate per 1,000 gallons of consumption beyond the monthly minimum.

The City has a substantial number of unmetered consumers connected to the water system for which no rate was specified in the tariff sheets submitted to the Commission.

29. As previously mentioned in this order the City has a mix of metered and unmetered service connections to its water utility. This mix results in a

certain degree of rate inequity between the differing types of service connections.

Those consumers who are receiving service through a meter are paying for the actual amount of water consumed during a billing period and provide a revenue contribution to the utility on an actual consumption basis. Those consumers receiving service through an unmetered service connection are paying for an assumed amount of water consumption and provide a revenue contribution to the utility on a hypothetical consumption basis which may or may not reflect the actual revenue contribution that should be received from those consumers. The unmetered consumer may be utilizing water in a greater or lesser amount than the assumed consumption level, and depending upon the actual consumption of the consumer may be over contributing or under contributing to the overall revenue requirement of the water utility.

To insure that all consumers connected to the water utility are providing a revenue contribution which is equal to costs they impose on the water system the City should meter all service connections.

30. During the course of this proceeding it was determined that the City water utility was not billing the City of Scobey for its water usage. The Applicant's provision of water service to the City of Scobey, at no charge, is contrary to statute (69-3-305, MCA), therefore, the water utility should discontinue this practice and start rendering a bill to the City. The City's consumption, as previously outlined in this order, should be included in the water utility's rate design and revenue projections.

31. The City did not present a cost of service study in its application, and absent such study, the Commission cannot determine what level of revenue contribution should be exacted from each customer classification.

The rate design, or distribution of the needed revenue amongst the various customer classes must in the Commission's view be fair, give the consumer the proper price signal to encourage prudent use of a limited resource, and avoid or delay future rate increases that could result from unwarranted increases in consumption that would require the construction of additional plant.

Since the Applicant has not submitted a cost of service study the Commission must determine the reasonableness of the proposed rate design using criterion that is not purely cost of service based.

32. The Applicant in this Docket has proposed the implementation of a metered rate schedule that is applicable to all consumers connected to the water system. The proposed rate structure includes a minimum monthly charge and a two block inverted commodity rate. The Applicant's witnesses indicated that they are proposing implementation of this type of rate structure in an effort to discourage excess usage by consumers and decrease the water demand placed upon the existing facilities.

The price placed on a commodity has a dramatic impact on the consumption patterns of the consumer. Implementation of an inverted block rate structure should have the effect of lowering demand because of the consumers desire to minimize the monthly water bill and result in the utility having sufficient available water supplies to meet the peak demand placed on the water system.

33. Since the Applicant's proposed rate structure should have the effect of lowering demand placed on the water system by metered consumers the Commission finds that the City's rate design proposal, once City usage is included, is reasonable.

The City should also include in its tariff a specified monthly rate for unmetered consumers. This rate should be developed using the consumption information outlined in previous Findings of Fact contained herein.

MISCELLANEOUS

34. The Applicant has never viewed the provision of fire protection as a separate cost center in the operation of its water utility. The provision of fire protection represents a significant cost to the water utility and these costs should be examined and should be recovered through the implementation of a fire hydrant rental fee.

The Applicant's rate proposal includes fire protection costs as a component of the commodity charges assessed water consumers. This method of recovering costs associated with the provision of fire protection is, in the

Commission's opinion, inappropriate. Recovery of the fire protection cost through the commodity charges is inequitable because water consumption has no correlation with fire flow requirements of the customer classifications.

Fire flow requirements in a residential section of the City's service area are generally lower than that required in a commercial area, therefore capital costs associated with fire protection in the residential area should be less than in the commercial area. Since fire flow requirements are lower in a residential than a commercial area the peaking factor applicable to allocation of this cost will be lower for a residential area.

Generally speaking it is the residential consumer who utilizes the greater quantity of water on an annual basis therefore, it is clear that the residential customer would be contributing a proportionately greater share toward fire protection costs than the commercial, who imposes the greater fire flow requirements.

35. The Commission for purposes of this proceeding, has accepted the City's recovery of fire protection costs through commodity charges, but recognizes that fire protection cost recovery in this manner presents limited rate inequities relative to the various customer classes.

Variances exist in the cost of providing fire protection to the various customer classes and in future proceedings before this Commission the City should be prepared to demonstrate that fire protection charges recognize these cost variances.

CONCLUSIONS OF LAW

1. The Montana Public Service Commission properly exercises jurisdiction over the parties and subject matter in this proceeding. Title 69, Chapters 3 and 7, MCA.

2. The Montana Public Service Commission has afforded all interested parties in this proper notice and opportunity to participate. Section 69-3-303, MCA, Title 2, Chapter 4, MCA.

3. The rates approved herein are reasonable, just and proper. Section 69-3-201, MCA.

ORDER

NOW THEREFORE, IT IS ORDERED THAT:

1. The City of Scobey shall file tariffs consistent with the Findings of Fact for Docket No. 85.11.47 contained herein.
2. The City of Scobey is authorized to issue a revenue bond in the amount of \$400,000 with the requirements as outlined in of Fact No. 18.
3. The rates approved herein shall not become effective until the tariffs and necessary calculations for the bond issue have been submitted for approval by the Commission.
4. A full, true, and correct copy of this order shall be sent by first class mail to the Applicant and all other appearances herein.

DONE IN OPEN SESSION at Helena, Montana, this 14th day of April, 1986, by a 5 - 0 vote.

BY ORDER OF THE MONTANA PUBLIC SERVICE COMMISSION.

Danny Oberg, Commissioner and
Hearing Examiner

Clyde Jarvis, Chairman

John B. Driscoll, Commissioner

Howard L. Ellis, Commissioner

Tom Monahan, Commissioner

ATTEST:

Trenna Scoffield
Commission Secretary

(SEAL)

NOTE: Any interested party may request the Commission to reconsider this decision. A motion to reconsider must be filed within ten (10) days. See 38.2.4806, ARM.